

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method, comprising:
~~at a network device, defining~~ providing a hypertext transfer protocol (HTTP)
connection by a client-side connection and a HTTP server-side connection;
~~establishing the HTTP connection between a client terminal and a server in~~
~~response to a request from the client terminal to access the server~~receiving at said network
device via said client-side connection a communication that signals said server-side connection
to close; and

maintaining persistent, by said network device, at least the server-side connection
~~using a plurality of different techniques in response to said communication received via said~~
~~client-side connection.~~
2. (Original) The method of claim 1, further comprising closing the client-side connection while the server-side connection is maintained persistent.
3. (Currently Amended) The method of claim ~~2-1~~ wherein maintaining
persistent at least the server-side connection ~~using the plurality of different techniques in~~
~~response to said communication received via said client-side connection~~ includes;

~~maintaining~~de-linking, by said network device, the server-side connection ~~from~~
~~the client-side connection~~ persistent in response to a RESET packet ~~sent from the client~~
~~terminal~~received by said network device via said client-side connection.

4. (Currently Amended) The method of claim ~~2-1~~ wherein maintaining persistent at least the server-side connection ~~using the plurality of different techniques in response to said communication received via said client-side connection~~ includes:

~~maintaining~~ de-linking, by said network device, the server-side connection from the client-side connection persistent in response to a FIN packet ~~sent from the client terminal~~ received by said network device via said client-side connection.

5. (Currently Amended) The method of claim 1, further comprising said network device closing both the client-side and server-side connections in response to a FIN packet ~~sent from the server~~ received by said network device via said server-side connection.

6. (Currently Amended) The method of claim 1 wherein maintaining persistent at least the server-side connection ~~using the plurality of different techniques in response to said communication received via said client-side connection~~ includes:

identifying, by said network device, a Connection: Close header in the request from the client communication received via the client-side connection; and

replacing, by said network device, the Connection: Close header in the request communication with a Connection: Keep-Alive header.

7. (Currently Amended) The method of claim 6, further comprising said network device performing at least one of increasing a total length of a packet having the Connection: Close header, fragmenting the packet having the Connection: Close header, and recalculating a checksum of the packet.

8. (Currently Amended) The method of claim 1 wherein maintaining persistent at least the server-side connection ~~using the plurality of different techniques in response to said communication received via said client-side connection~~ includes:

inserting, by said network device, a Connection: Keep-Alive header in the request communication if the request communication does not contain any header information indicative of whether to close the HTTP connection.

9. (Currently Amended) The method of claim 1 wherein maintaining persistent at least the server-side connection ~~using the plurality of different techniques in response to said communication received via said client-side connection~~ includes:

modifying, by said network device, a header in the request communication, the header being indicative of whether to close the HTTP connection, from a format that signals the server-side connection to close to a format that is unrecognizable by the a server coupled to said server-side connection, to cause the server to ignore the modified header.

10. (Original) The method of claim 9 wherein modifying the header in the request to the form that is unrecognizable to the server includes at least one of modifying a name of the header and modifying a value of the header.

11. (Currently Amended) The method of claim 1 wherein maintaining persistent at least the server-side connection ~~using the plurality of different techniques in response to said communication received via said client-side connection~~ includes:

changing, by said network device, a HTTP version value indicated in the request communication to another HTTP version value that is recognizable by the a server, coupled to said server-side connection, as being associated with a persistent connection.

12. (Currently Amended) The method of claim 11, further comprising adjusting a checksum based on ~~the a~~ difference between the HTTP version values.

13. (Currently Amended) The method of claim 1 wherein the ~~request communication~~ includes a header having a proxy format.

14. (Currently Amended) A method, comprising:

establishing at a network device a client-side connection and a server-side connection;

reading, by said network device, content of a packet ~~sent~~received via the client-side connection ~~to determine one of several techniques to use to extend a persistency of the server-side connection~~; and

extending, by said network device, the persistency of the server-side connection ~~while closing the client-side connection, in response to the packet sent via the client-side connection and based upon~~ if the read content of the packet ~~signals said server-side connection to close~~.

15. (Original) The method of claim 14 wherein establishing the client-side and server-side connections include establishing these connections as part of a hypertext transfer protocol (HTTP) connection.

16. (Currently Amended) The method of claim 14 wherein extending, by said network device, the persistency of the server-side connection ~~while closing the client-side connection based upon the read content of the packet~~ includes:

maintaining persistent~~de-linking~~, by said network device, the server-side connection from the client-side connection, if the read content indicates that the packet is a RESET packet received via the client-side connection.

17. (Currently Amended) The method of claim 14 wherein extending, by said network device, the persistency of the server-side connection ~~while closing the client-side connection based upon the read content of the packet~~ includes:

maintaining persistent~~de-linking~~, by said network device, the server-side connection from the client-side connection, if the read content indicates that the packet is a FIN packet received via the client-side connection.

18. (Currently Amended) The method of claim 14 wherein extending, by said network device, the persistency of the server-side connection ~~while closing the client-side connection based upon the read content of the packet~~ includes:

identifying, by said network device, header information of the packet received via the client-side connection that ~~is indicative of a closing of the HTTP~~ signals the server-side connection to close; and

replacing, by said network device, the identified header information with new header information that ~~is indicative of maintaining~~ maintains the server-side connection persistent.

19. (Currently Amended) The method of claim 14 wherein extending, by said network device, the persistency of the server-side connection ~~while closing the client-side connection based upon the read content of the packet~~ includes:

determining, by said network device, that header information of the packet received via the client-side connection ~~does not include any information indicative of a closing of the HTTP that signals the server-side connection to close~~; and

applying, by said network device, header information in the packet that is ~~indicative of maintaining~~ maintains the server-side connection persistent.

20. (Currently Amended) The method of claim 14 wherein extending, by said network device, the persistency of the server-side connection ~~while closing the client-side connection based upon the read content of the packet~~ includes:

modifying, by said network device, header information in the packet, ~~the header information being indicative of a closing of the server-side connection~~, received via the client-side connection from a format that signals said server-side connection to close to a format that is unrecognizable by a server that is to receive the packet to cause the server to maintain via the server-side connection persistent.

21. (Currently Amended) The method of claim 14 wherein extending, by said network device, the persistency of the server-side connection ~~while closing the client-side connection based upon the read content of the packet~~ includes:

changing, by said network device, a protocol version value indicated in the packet received via the client-side connection to a different protocol version value that corresponds to maintaining a persistent connection.

22. (Currently Amended) An article of manufacture, comprising:
a machine-readable storage medium having instructions stored thereon that are executable by a processor of a network device to:

~~define~~ provide at said network device a hypertext transfer protocol (HTTP) ~~connection by a client-side connection and a~~ HTTP server-side connection;

~~establish the HTTP connection between a client terminal and a server in response to a request from the client terminal to access the server~~ receive via said client-side connection a communication that signals said server-side connection to close; and

maintain persistent, by said network device, at least the server-side connection ~~using a plurality of different techniques~~ in response to said communication received via said client-side connection.

23. (Currently Amended) The article of manufacture of claim 22 wherein the instructions to maintain at least the server-side connection persistent include instructions executable by said processor to:

maintain de-link, by said network device, the server-side connection persistent from the client-side connection in response to ~~at least one of a RESET packet and a FIN packet sent from the client terminal~~ received via the client-side connection.

24. (Currently Amended) The article of manufacture of claim 22 wherein the instructions to maintain at least the server-side connection persistent include instructions executable by said processor ~~to perform at least one of:~~

~~maintain the server-side connection persistent by changing~~change, by said network device, header information in the ~~request communication~~ received via the client-side connection to new header information ~~indicative of~~corresponding to a persistent connection; and
maintain the server-side connection persistent by inserting, in the request, new header information that is indicative of the persistent connection.

25. (Currently Amended) The article of manufacture of claim 22 wherein the instructions to maintain at least the server-side connection persistent include instructions executable by said processor to:

~~maintain the server-side connection persistent via modification~~modify, by said network device, ~~of~~header information in the ~~request communication~~ that signals the server-side connection to close to a format unrecognizable by the ~~a~~ server coupled to said server-side connection, to cause the server to ignore the modified header information ~~and instead maintain the server-side connection persistent.~~

26. (Currently Amended) The article of manufacture of claim 22 wherein the instructions to maintain at least the server-side connection persistent include instructions executable by said processor to:

~~maintain the server-side connection persistent via modification~~modify, by said network device, ~~of~~a protocol version number indicated in the ~~request communication~~ to a different protocol version number that corresponds to a persistent connection.

27. (Currently Amended) An apparatus, comprising:
a network device adapted to be communicatively coupled between a client terminal and a server, the network device having:

a communication terminal means for establishing a client-side connection and a server-side connection; and

a means for reading content of a packet ~~sent~~received via the client-side connection ~~to determine one of several techniques to use to extend a persistency of the~~

~~server-side connection, and a means for extending the persistency of the server-side connection while closing the client-side connection, in response to the packet sent via the client-side connection and based upon~~ if the read content of the packet signals said server-side connection to close.

28. (Currently Amended) The apparatus of claim 27 wherein the means for extending the persistency of the server-side connection ~~includes a means for modifying~~modifies header information in the packet to ~~an unrecognizable~~ format unrecognizable to a server coupled to said server-side connection to receive said packet.

29. (Currently Amended) The apparatus of claim 27 wherein the means for extending the persistency of the server-side connection ~~includes a means for modifying~~modifies header information in the packet to indicate a protocol version that corresponds to a persistent connection.

30. (Currently Amended) The apparatus of claim 27 wherein the means for extending the persistency of the server-side connection ~~includes at least one of a means for maintaining~~dc-links the server-side connection ~~persistent while closing the client-side connection based on~~from the client-side connection in response to RESET content in the packet received via the client side connection, ~~a means for maintaining the server-side connection persistent while closing the client-side connection based on~~ FIN content in the packet, ~~a means for replacing a Connection: Close header of the packet with a Connection: Keep-Alive header, and a means for inserting a Connection: Keep-Alive header in the packet.~~

31. (Currently Amended) An apparatus, comprising:
a network device having:

first and second communication terminals ~~through which is defined a portion of a hypertext transfer protocol (HTTP) connection,~~ the first terminal being

associated with a hypertext transfer protocol (HTTP) client-side connection and the second terminal being associated with a HTTP server-side connection;

a processor coupled to the first and second communication terminals to establish the HTTP connection between a client terminal and a server in response to a request from the client terminal to access the server; and

software executable by the processor to maintain persistent at least the server-side connection using a plurality of different techniques specified by the software in response to a communication received via said client-side connection that signals said server-side connection to close.

32. (Currently Amended) The apparatus of claim 31 wherein the software includes code executable by said processor of said network device to maintain the server-side connection persistent includes code to modify a format of header information in the request communication received via the client-side connection from a format that signals said server-side connection to close to a format that is unrecognizable by the a server coupled to said server-side connection, to cause the server to ignore the header information and instead maintain the server-side connection persistent.

33. (Currently Amended) The apparatus of claim 31 wherein the software includes code executable by said processor of said network device to maintain the server-side connection persistent includes code to modify a HTTP protocol version value indicated in the request communication received via the client-side connection to a HTTP protocol version value that is associated with a persistent connection.

34. (Currently Amended) The apparatus of claim 31 wherein the software includes code executable by said processor of said network device to maintain the server-side connection persistent while closing includes code to de-link the server-side connection from the client-side connection in response to at least one of said communication, containing a RESET, and a FIN sent from the client terminal received via said client-side connection.

35. (Currently Amended) The apparatus of claim 31 wherein the software ~~includes code~~executable by said processor of said network device to maintain the server-side connection persistent ~~via at least one of~~modification of~~includes code to modify~~ a Connection: Close header in the ~~request communication~~ to Connection: Keep-Alive ~~and insertion of the Connection: Keep-Alive in the request header~~.

36. (Currently Amended) The apparatus of claim 31 wherein the software ~~includes code~~is also executable by said processor of said network device to close the server-side connection in response to at least one of a RESET and FIN ~~sent from the server~~received via the server-side connection.

37-42. (Canceled)

43. (New) The method of claim 1 wherein said network device includes a switch.

44. (New) The method of claim 11 wherein changing the HTTP version value to another HTTP version value includes changing, by said network device, from HTTP version 1.0 indicated in said request to HTTP version 1.1.

45. (New) The method of claim 14 wherein said network device includes a switch.

46. (New) The article of manufacture of claim 22 wherein said network device includes a switch.

47. (New) The article of manufacture of claim 22 wherein the instructions to maintain at least the server-side connection persistent, in response to said communication received via said client-side connection, include instructions executable by said processor to:

de-link, by said network device, the server-side connection from the client-side connection in response to a FIN packet received via the client-side connection.

48. (New) The apparatus of claim 27 wherein said network device includes a switch.

49. (New) The apparatus of claim 27 wherein the means for extending the persistency of the server-side connection, if the read content of the packet signals said server-side connection to close, maintains persistency by de-linking the server-side connection from the client-side connection in response to FIN content in the packet received via the client side connection.

50. (New) The apparatus of claim 27 wherein the means for extending the persistency of the server-side connection, if the read content of the packet signals said server-side connection to close, maintains persistency by de-linking the server-side connection from the client-side connection in response to RESET content in the packet received via the client side connection.

51. The apparatus of claim 27 wherein the means for extending the persistency of the server-side connection, if the read content of the packet signals said server-side connection to close, maintains persistency by replacing a Connection: Close header of the packet with a Connection: Keep-Alive header.

52. (New) The apparatus of claim 31 wherein the software executable by said processor of said network device to maintain the server-side connection persistent, in response to said communication received via said client-side connection that signals said server-side connection to close, includes code to de-link the server-side connection from the client-side connection in response to said communication, containing a FIN, received via said client-side connection.